U.S. Appln; No. 09/476,485

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Comm. Resp. to Examiner Inquiry dated November 22, 2004

EXHIBIT G

A copy of page 29 of the instant application which provides support for making conservative amino acid substitutions.

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isolated from a yam bean has the amino acid sequence comprising the amino acid sequence of SEQ ID NO: 8, more preferably has a β subunit having an amino acid sequence which comprises the amino acid sequence of SEQ ID NO: 9, even more preferably has an α subunit having an amino acid sequence which comprises the amino acid sequence of SEQ ID NO: 10, and, even more preferably, is encoded by a nucleic acid having a nucleic acid sequence which comprises the nucleic acid sequence of SEQ ID NO: 7.

In certain embodiments of the first aspect of the invention, the FRIL family member molecule is a mutant derived from a second member of the FRIL family, wherein the mutant is selected from the group consisting of a substitution mutant, a deletion mutant, an addition mutant, or a combination thereof (e.g., a mutant of DI-FRIL or Pv-FRIL described below). For example, it is preferred to substitute amino acids in a sequence with equivalent amino acids. Groups of amino acids known normally to be equivalent are: (1) Ala(A), Ser(S), Thr(T), Pro(P), and Gly(G); (2) Asn(N), Asp(D), Glu(E), Gln(Q); (3) His(H), Arg(R), Lys(K); (4) Met(M), Leu(L), Ile(I), Val(V); and (5) Phe(F), Tyr(Y), Trp(W). Substitutions, additions, and/or deletions in an amino acid sequence can be made as long as the mutant FRIL family member molecule continues to satisfy the functional criteria described herein. An amino acid sequence that is substantially the same as another sequence, but that differs from the other sequence by means of one or more substitutions, additions, and/or deletions, is considered to be an equivalent sequence. Preferably, less than 50%, more preferably less than 25%, and still more preferably less than 10%, of the number of amino acid residues in a sequence are substituted for, added to, or deleted from the FRIL family member molecule upon which the mutant FRIL family member was derived.

In certain embodiments of the first aspect of the invention, the FRIL family member molecule is a fusion protein comprising a first portion and a second portion, wherein the first portion is derived from a second member of the FRIL family. By "fusion protein" is meant a molecule comprising at least two proteins or polypeptide fragments thereof joined together, wherein the proteins or polypeptide fragments